

CLAIMS

What is claimed is:

1. A conveyor system for transport of containers, in particular an airport baggage handling system, comprising:
a conveyor having a curved transport path with one end defining an entry zone and another end defining an exit zone; and
a container propulsion mechanism for moving a container along the curved transport path between the entry and exit zones,
wherein the curved transport path is constructed for movement of the container in an inwardly inclined disposition for reducing centrifugal forces.
2. The conveyor system of claim 1, wherein the curved transport path is constructed for movement of the container in a manner that an outer side of the container is elevated in relation to an inner side of the container.
3. The conveyor system of claim 2, wherein the conveyor has a carriage guided on an outer guide rail of the conveyor for lifting the container.

4. The conveyor system of claim 1, and further comprising coupling means for detachably connecting the carriage to the container, when the container enters the entry zone, for conjoint movement of the carriage and the container along the curved transport path by the container propulsion mechanism, said coupling means being constructed for detachment of the carriage from the container, when the container reaches the exit zone.
5. The conveyor system of claim 3, wherein the carriage engages a recess of the container.
6. The conveyor system of claim 4, wherein the coupling means includes a catch provided on the carriage and a recess formed in a bottom underside of the container.
7. The conveyor system of claim 3, and further comprising a return mechanism for moving the carriage back to the entry zone.
8. The conveyor system of claim 7, wherein the return mechanism includes a guide rail, which is disposed below the transport path and receives the carriage at the exit zone, and a positioning element for moving the carriage upwards to the entry zone.

9. The conveyor system of claim 8, wherein the guide rail is arranged in slanted disposition to allow the carriage to spontaneously roll back to the entry zone by its own weight.
10. The conveyor system of claim 8, wherein the positioning element is configured in the form of a wheel for moving the carriage upwards about its outer circumference and realizing a form-fitting engagement with the container.
11. The conveyor system of claim 2, wherein the conveyor includes two rails disposed at an elevation sufficient to lift the container and supporting the outer side of the container.
12. The conveyor system of claim 10, wherein each of the rails is constructed as sliding rail.
13. The conveyor system of claim 10, wherein the rails are constructed to form ramps in the entry zone and ramps in the exit zone for lifting the outer side of the container in the entry zone to rail level and for lowering the outer side of the container in the exit zone to a horizontal disposition.
14. The conveyor system of claim 13, wherein the ramps in the entry zone are staggered, and the ramps in the exit zone are staggered.

15. The conveyor system of claim 14, wherein the rails are constructed in the entry and exit zones in such a manner that in transport direction of the container an outer one of the two rails is shorter than an inner one of the two rails to form the staggered ramps.
16. The conveyor system of claim 15, wherein the ramps are staggered in transport direction by about a container length.
17. The conveyor system of claim 11, wherein the container has a bottom side resting on the rails.
18. The conveyor system of claim 11, wherein the container has an outwardly directed projection for support on the rails.